

Sent via Electronic Mail

Mr. Matthew J. Ohl  
USEPA Region 5  
77 West Jackson Boulevard, Mail Code: SR-6J  
Chicago, IL 60604-3590

**RE: MONTHLY PROGRESS REPORT - AUGUST 2019  
THIRD SITE, ZIONSVILLE, INDIANA**

Dear Mr. Ohl:

September 13, 2019

This Monthly Progress Report has been prepared by Ramboll US Corporation (Ramboll) on behalf of the Third Site Trust (the Trust) pursuant to the Administrative Order by Consent (the Order) for Third Site, located in Zionsville, Indiana (the Site). The Order became effective on December 2, 2002. This Monthly Progress Report includes activities conducted during the month of August 2019.

**I. Activities Completed During Reporting Month**

- Water pumping and treatment from the Third Site extraction wells was conducted throughout August. With the exception of EW-3, the extraction wells operated for approximately 28 days during the month. (As noted in the May 2018 monthly progress report, extraction well EW-3 is non-operational and is expected to remain so throughout the ERH remediation.) The extraction wells shut down on two occasions in late August due to a high-level alarm in Tank T-11. The floats were cleaned, and the wells were restarted on the following day.
- Water treatment system performance samples were collected on August 13. None of the effluent samples contained any contaminants of concern (COCs) above their respective effluent discharge limits. A discharge monitoring report will be submitted to IDEM in September.
- The groundwater flow modeling and capture zone analysis report was provided to USEPA on August 9 following a 10-day submission extension request to the agency.
- The ERH activities continued in August. A copy of the McMillan-McGee Corp. (M&M) August 2019 progress report is provided as Attachment A. The M&M June 2019 progress monitoring report indicates that at the end of June, P-2 was the only location within the DNAPL Containment Area with a concentration above the total volatile organic compound (VOC) goal of 4,285 micrograms per liter (ug/L). ERH operational sampling conducted by M&M from P-2 on August 2, 2019; however, showed total VOCs below the 4,285 ug/L total VOC remediation goal. At that time, 1,2-Dichlorobenzene was the only constituent detected in either sample. Based on the August 2, 2019 operational data, the Trustees authorized M&M to suspend ERH

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treatment in the DNAPL Containment Area to allow the area to cool down for compliance sampling by Ramboll.

**II. Data Generated During the Reporting Month**

- ERH operational sampling was conducted by M&M on August 2, 2019 from P-2. Total VOC concentrations of 456 ug/L and 600 ug/L were detected in the P-2 sample and duplicate sample versus the 4,285 ug/L total VOC remediation goal set forth the in the M&M April 2018 ERH Remedial Design Report. The laboratory report for this sampling event was provided in the July 2019 Monthly Progress Report.
- Pumped-water volume data for the extraction wells were collected during August. Collected data are provided in Attachment B.

**III. Developments/Difficulties Encountered During the Reporting Month**

- Based on the August 2, 2019 ERH operational data, ERH treatment in the DNAPL Containment Area was suspended in August to allow the area to cool down for compliance sampling.
- No difficulties were encountered during the month.

**IV. Activities Anticipated for Next Reporting Month**

- Operation and maintenance of the pump & treat system will continue.
- ERH compliance sampling for the DNAPL Containment Area was conducted on September 5.
- A pump & treat progress water sampling will be conducted during the week of September 23, weather permitting.

Please do not hesitate to contact me if you have any questions concerning this Monthly Progress Report.

Sincerely,

Ramboll US Corporation

**Andrew A. Gremos, LPG, CHMM**

Principal

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**Attachments**

- A. McMillan-McGee Corp. Progress Report
- B. Extraction Well Pumped-Water Volume Data

**RAMBOLL**

**ATTACHMENT A**

**McMillan-McGee Corp. Progress Report**

985 South US Highway 421, Zionsville, Indiana

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# Progress Report

**August 2019**

Installation, Operation, and Maintenance of ERH at Third Site

985 South US Highway 421  
Zionsville, Indiana

## **Summary**

This progress report has been prepared by McMillan-McGee Corporation (Mc<sup>2</sup>) on behalf of the Third Site Trust (TST), pursuant to the Administrative Order by Consent (the order) for Third Site, located in Zionsville, Indiana (the Site). The revised Order approving Electrical Resistive Heating (ERH) groundwater remediation became effective on December 16, 2016. The Electro-Thermal Dynamic Stripping Process (ET-DSP™) is Mc<sup>2</sup>'s patented thermal remediation technology employed for this project. This monthly progress report includes activities conducted during the month of August 2019.

### **1. Activities Completed During Reporting Month**

ET-DSP™ heating, extraction and treatment operations continued through July after restarting in April based on confirmatory groundwater sampling results.

After July 16, remedial action continued only around monitoring well P-2, where a 1,2-dichlorobenzene concentration of 4,740 µg/L was detected in the July 12 groundwater sample. Multi-phase extraction from the wellfield continued in the vicinity of P-2, and ET-DSP™ electrodes at three well locations adjacent P-2 were energized to perform focused heating in the immediate area.

Groundwater screening samples were obtained from the P-2 monitoring well on August 2, with results available on August 6. The sampling was not performed to a confirmatory standard and was only intended to indicate progress of treatment. Laboratory analysis indicated total VOC concentration in the groundwater was below the treatment target of 4,285 µg/L at P-2. Using the Method 8260 analyte list, only 1,2-dichlorobenzene was detected, at 456 µg/L and 600 µg/L (duplicate).

As a result of the August 2 groundwater screening results, the ET-DSP™ and multi-phase extraction and treatment systems were shut down. The remediation systems remained off in anticipation of confirmatory sampling, expected to occur in early September.

The following activities occurred during the reporting period:

- In the afternoon of July 25, it was determined that the site server was malfunctioning and had to be replaced. The ET-DSP™ and liquid extraction/treatment systems were offline as a result; the issue was resolved on August 6.
- Mc<sup>2</sup> obtained groundwater screening samples from monitoring well P-2 on August 2. Laboratory results were received on August 6. Based on the results, the remediation systems were shut off in anticipation of confirmatory sampling.
- An IWM operator was onsite on August 19 to purge the extraction and treatment system of remaining contaminants. On August 20, it was determined that the carbon regeneration system could not operate due to a failed pressure controller. The part was replaced on August 28 and the carbon media in the two VGAC vessels were regenerated. From August 28 to 30, the treatment system was drained of liquids to the extent possible.

## **2. Data Generated During Reporting Month**

- Mc<sup>2</sup> continued generating data per the project requirements defined in the Sampling and Analysis Plan until August 6. The data requirements for thermal remediation operations are summarized in Table 1.
- Mc<sup>2</sup> obtained groundwater screening samples from monitoring well P-2 on August 2. Laboratory results were received on August 6 (refer to §1).

## **3. Developments/Difficulties Encountered During the Reporting Month**

- Failure of the site server resulted in downtime for the ET-DSP™ and liquid extraction/treatment systems from July 25 to August 6.

## **4. Activities Anticipated for Next Reporting Month**

- Confirmatory sampling, to be performed by Ramboll, is scheduled for September 5.
- Mc<sup>2</sup> will complete the interim report for project operations through February 2019. The report will be reviewed by TST prior to submission to USEPA.

Item	Media	Location	Method	Frequency
Power, current, voltage	Subsurface	Electrodes	PDS (automatic)	Minutely (averaged daily)
Temperature	Subsurface	Sensor wells	OptiTAM© (automatic)	Hourly (averaged daily)
Temperature	Extracted fluids	Extraction wells, treatment system	Temperature gauge or gun (manual)	Daily
Vacuum	Vapor extracted	Vacuum Monitoring/ Extraction wells	Vacuum gauge (manual)	Daily
Level	Groundwater	Extraction and monitoring wells	Water Level Interface Probe	Weekly
Flow Rate	Vapor extracted	Treatment influent	Averaging pitot tube (manual)	Daily
Flow Rate	Vapor discharged	Treatment effluent	Averaging pitot tube (manual)	Daily
Flow Rate	Vapor extracted	Extraction wells	Averaging pitot tube (manual)	Biweekly
Volume	Water extracted	Treatment influent	Flow totalizer (manual)	Daily
Volume	Water discharged	Treatment effluent	Flow totalizer (manual)	Daily
Volume	Water injected	Treatment reinjection	Flow totalizer (manual)	Daily
Volume	Water injected	Electrodes	WCS (automatic)	Hourly (averaged daily)
Vapor VOCs	Vapor extracted	Extraction wells	PID (manual)	Biweekly
Vapor VOCs	Vapors treated	Treatment system	PID (manual)	Daily
Vapor VOCs	Vapor discharged	Treatment effluent	PID (manual)	Daily
Vapor VOCs <sup>1</sup> (Analytical)	Vapors treated	Selected treatment system sample ports	USEPA TO-15 modified (Tedlar bag) (manual)	Biweekly
Liquid VOCs <sup>1</sup> (Analytical)	Liquids treated	Selected treatment system sample ports	USEPA 8260B Pump or valve (manual)	Biweekly

Table 1: Monitoring Parameters for Third Site ERH

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**ATTACHMENT B**

**Extraction Well Pumped-Water Volume Data**

**Table 1**  
**Extraction Well Pumped Water Volumes (gallons)**  
**Third Site Superfund Site**  
**Zionsville, Indiana**

Date	Mode	EW-1	EW-2	EW-3	EW-4	EW-5	Period Total	Total Pumped
12/6/2013	Batch 1	1,859	1,733	131	3,968	1,589	9,280	9,280
12/9/2013		2,733	2,860	195	7,011	2,344	5,863	15,143
12/10/2013		2,994	3,672	221	9,211	2,554	12,789	18,652
12/11/2013		0	0	0	0	0	0	0
12/16/2013		772	10,449	0	16,058	55,221	82,500	82,500
1/13/2014		4,520	11,519	0	18,926	59,981	12,446	94,946
1/14/2014		26,371	15,321	0	30,133	77,242	54,121	149,067
1/15/2014		41,936	17,978	0	38,879	89,976	39,702	188,769
4/2/2014		41,936	17,978	0	38,879	89,976	0	188,769
4/3/2014		51,444	17,978	0	41,710	108,055	30,418	219,187
4/4/2014	Batch 2	77,384	19,264	0	53,925	127,215	58,601	277,788
4/5/2014		77,384	19,264	0	65,546	143,233	27,639	305,427
4/7/2014		77,384	19,264	0	87,083	172,914	51,218	356,645
4/8/2014		83,474	19,264	0	99,545	189,383	35,021	391,666
4/9/2014		89,799	19,264	0	111,584	204,480	33,461	425,127
4/10/2014		109,501	19,264	0	120,069	218,641	42,348	467,475
4/15/2014		114,796	19,264	0	120,069	222,395	9,049	476,524
4/16/2014		133,884	19,264	0	121,354	236,834	34,812	511,336
4/17/2014		152,518	19,264	0	126,084	251,432	37,962	549,298
4/18/2014		167,568	19,815	20	129,847	263,372	31,324	580,622
4/19/2014	Continuous Pumping	180,213	22,500	171	133,608	274,179	30,049	610,671
4/21/2014		200,706	26,887	293	139,495	291,460	48,170	658,841
4/22/2014		205,561	30,408	524	140,914	292,246	10,812	669,653
4/23/2014		207,779	33,825	732	141,568	297,434	11,685	681,338
4/24/2014		207,779	37,343	956	141,568	297,434	3,742	685,080
4/25/2014		207,918	40,738	1,169	141,611	297,500	3,856	688,936
4/28/2014		254,388	49,599	1,688	152,435	338,923	108,097	797,033
4/29/2014		255,097	54,025	1,948	160,135	356,941	31,113	828,146
4/30/2014		273,934	57,823	2,166	166,457	372,251	44,485	872,631
5/1/2014		288,279	60,801	2,334	170,850	384,410	34,043	906,674
5/5/2014		291,622	61,391	2,371	171,439	387,045	7,194	913,868
5/6/2014		309,542	64,789	2,551	175,887	401,883	40,784	954,652
5/7/2014		325,874	68,028	2,736	179,587	415,797	37,370	992,022
5/8/2014		340,468	70,977	2,904	182,785	428,374	33,486	1,025,508
5/9/2014		358,769	74,725	3,114	186,698	444,260	42,058	1,067,566
5/12/2014		402,898	83,989	3,646	197,945	482,254	103,166	1,170,732
5/15/2014		402,898	84,524	3,691	199,270	484,489	4,140	1,174,872
5/16/2014		407,052	89,063	4,002	211,358	502,634	39,237	1,214,109
5/19/2014		446,956	98,305	4,641	236,109	538,597	110,499	1,324,608
5/20/2014		446,956	102,261	4,877	248,196	555,596	33,278	1,357,886
5/21/2014		446,956	106,044	5,107	260,053	572,213	32,487	1,390,373
5/22/2014		446,956	110,813	5,459	271,440	589,318	33,613	1,423,986
5/28/2014		446,956	111,116	5,479	272,311	590,670	2,546	1,426,532
5/29/2014		449,630	115,031	5,689	281,870	608,034	33,722	1,460,254
5/30/2014		464,597	118,056	5,841	286,932	621,127	36,299	1,496,553
6/2/2014		468,348	129,367	5,959	308,657	670,474	86,252	1,582,805
6/3/2014		468,481	131,416	6,257	320,008	688,802	32,159	1,614,964
6/4/2014		468,481	135,549	6,511	332,029	706,874	34,480	1,649,444
6/5/2014		468,481	139,036	6,760	341,672	706,874	13,379	1,662,823
6/6/2014		468,481	142,784	6,804	352,984	706,874	15,104	1,677,927
6/7/2014		468,481	143,178	6,828	354,206	706,874	1,640	1,679,567
6/9/2014		468,481	151,885	7,326	381,034	706,874	36,033	1,715,600
6/10/2014		468,481	155,499	7,514	392,476	706,874	15,244	1,730,844
6/11/2014		468,481	159,270	7,708	404,143	706,874	15,632	1,746,476
6/12/2014		468,481	162,964	7,900	415,397	706,874	15,140	1,761,616
6/13/2014		468,481	166,011	8,049	424,857	712,627	18,409	1,780,025
6/14/2014		468,481	166,011	8,049	424,857	727,935	15,308	1,795,333
6/16/2014		468,481	166,011	8,049	424,857	765,631	37,696	1,833,029
6/17/2014		468,481	166,011	8,049	424,857	781,834	16,203	1,849,232
6/18/2014		469,023	166,124	8,055	425,218	799,268	18,456	1,867,688
6/19/2014		486,851	170,480	8,147	436,756	817,112	51,658	1,919,346
6/30/2014		486,851	170,480	8,147	436,756	817,112	0	1,919,346

**Table 1**  
**Extraction Well Pumped Water Volumes (gallons)**  
**Third Site Superfund Site**  
**Zionsville, Indiana**

Date	Mode	EW-1	EW-2	EW-3	EW-4	EW-5	Period Total	Total Pumped
7/21/2014	Continuous Pumping (after repairs)	487,566	170,975	8,157	438,088	820,186	5,626	1,924,972
7/22/2014		489,596	174,143	8,162	444,588	839,231	30,748	1,955,720
7/23/2014		504,172	177,270	8,164	448,373	858,011	40,270	1,995,990
7/24/2014		520,453	181,466	8,167	452,675	880,134	46,905	2,042,895
7/28/2014		522,419	182,374	8,170	454,595	885,401	10,064	2,052,959
7/29/2014		536,955	185,828	8,173	457,850	905,446	41,293	2,094,252
7/30/2014		551,425	189,107	8,177	460,224	925,483	40,164	2,134,416
7/31/2014		565,311	192,178	8,179	462,333	944,628	38,213	2,172,629
8/1/2014		578,311	194,986	8,182	463,998	962,406	35,254	2,207,883
8/4/2014		620,588	203,703	8,186	468,611	1,019,901	113,106	2,320,989
8/5/2014		633,372	206,266	8,188	469,641	1,037,239	33,717	2,354,706
8/6/2014		646,730	208,932	8,191	470,865	1,055,334	35,346	2,390,052
8/7/2014		659,903	211,529	8,193	472,038	1,073,416	35,027	2,425,079
8/11/2014		711,032	221,427	8,197	475,815	1,142,939	134,331	2,559,410
8/12/2014		723,966	224,162	8,201	477,966	1,160,500	35,385	2,594,795
8/13/2014		736,619	227,214	8,203	479,649	1,177,706	34,596	2,629,391
8/14/2014		749,429	230,736	8,206	481,102	1,195,083	35,165	2,664,556
8/15/2014		761,993	233,036	8,209	481,878	1,212,843	33,403	2,697,959
8/18/2014		799,865	242,618	8,213	485,972	1,265,928	104,637	2,802,596
8/19/2014		812,610	245,553	8,216	487,310	1,284,070	35,163	2,837,759
8/20/2014		825,318	248,420	8,220	488,935	1,302,104	35,238	2,872,997
8/21/2014		837,706	251,188	8,223	490,833	1,319,171	34,124	2,907,121
8/22/2014		850,512	254,346	8,226	494,398	1,337,288	37,649	2,944,770
8/25/2014		888,764	262,590	8,235	503,202	1,395,825	113,846	3,058,616
8/26/2014		898,879	264,859	8,238	505,102	1,403,554	22,016	3,080,632
8/27/2014		914,327	268,120	8,241	508,020	1,429,087	47,163	3,127,795
8/28/2014		927,140	270,723	8,243	509,792	1,448,894	36,997	3,164,792
9/2/2014		986,690	281,865	8,249	518,382	1,542,506	172,900	3,337,692
9/3/2014		989,099	284,473	8,250	524,266	1,564,037	32,433	3,370,125
9/5/2014		1,016,119	289,284	8,251	526,996	1,606,858	77,383	3,447,508
9/8/2014		1,052,927	296,135	8,251	531,284	1,664,705	105,800	3,553,308
9/9/2014		1,065,480	297,955	8,253	532,110	1,680,748	31,238	3,584,546
9/10/2014		1,079,591	300,367	8,253	538,976	1,702,328	44,969	3,629,515
9/11/2014		1,094,399	303,758	8,255	550,495	1,722,286	49,678	3,679,193
9/12/2014		1,108,430	307,915	8,255	562,011	1,741,337	48,755	3,727,948
9/15/2014		1,149,511	309,208	8,255	592,739	1,798,608	130,373	3,858,321
9/16/2014		1,163,135	312,812	8,257	602,618	1,817,784	46,285	3,904,606
9/17/2014		1,173,643	315,225	8,257	609,749	1,832,824	35,092	3,939,698
9/19/2014		1,173,908	315,292	8,258	609,929	1,833,079	768	3,940,466
9/22/2014		1,188,779	318,799	8,259	620,028	1,852,370	47,769	3,988,235
9/24/2014		1,192,577	320,591	8,263	625,383	1,861,878	20,457	4,008,692
9/25/2014		1,208,195	323,894	8,263	635,029	1,883,484	50,173	4,058,865
9/26/2014		1,222,222	326,443	8,263	643,721	1,904,818	46,602	4,105,467
9/29/2014		1,262,953	334,881	8,263	669,356	1,962,677	132,663	4,238,130
9/30/2014		1,275,320	337,256	8,263	676,555	1,990,058	49,322	4,287,452
10/2/2014		1,301,283	338,478	8,263	691,425	2,016,277	68,274	4,355,726
10/6/2014		1,301,283	339,478	8,263	694,162	2,021,300	8,760	4,364,486
10/7/2014		1,304,901	342,859	8,263	705,343	2,042,117	38,997	4,403,483
10/9/2014		1,334,050	349,887	8,264	725,084	2,084,827	98,629	4,502,112
10/10/2014		1,348,496	353,572	8,265	735,333	2,105,786	49,340	4,551,452
10/13/2014		1,394,036	361,337	8,270	768,672	2,170,423	151,286	4,702,738
10/14/2014		1,410,240	365,837	8,272	780,037	2,191,291	52,939	4,755,677
10/15/2014		1,425,561	370,067	8,273	790,287	2,209,922	48,433	4,804,110
10/16/2014		1,425,683	371,168	8,275	793,060	2,214,920	8,996	4,813,106
10/17/2014		1,427,275	375,249	8,277	803,880	2,234,595	36,170	4,849,276
10/20/2014		1,466,116	376,939	8,282	830,824	2,284,421	117,306	4,966,582
10/21/2014		1,466,311	376,960	8,288	830,849	2,284,783	609	4,967,191
10/22/2014		1,468,828	377,621	8,292	832,650	2,287,771	7,971	4,975,162
10/23/2014		1,485,156	380,821	8,293	843,916	2,308,461	51,485	5,026,647
10/26/2014		1,529,344	385,102	8,294	876,769	2,368,674	141,536	5,168,183
10/28/2014		1,563,007	390,109	8,296	902,287	2,416,820	112,336	5,280,519
10/29/2014		1,577,768	393,430	8,297	913,117	2,437,840	49,933	5,330,452



























**Table 1**  
**Extraction Well Pumped Water Volumes (gallons)**  
**Third Site Superfund Site**  
**Zionsville, Indiana**

Date	Mode	EW-1	EW-2	EW-3	EW-4	EW-5	Period Total	Total Pumped
5/1/2019	Continuous pumping	1,232,030	292,271	0	367,108	1,438,901	30,103	49,217,138
5/3/2019		1,251,266	299,062	0	372,858	1,462,232	55,108	49,272,246
5/6/2019		1,281,640	309,726	0	381,998	1,498,812	86,758	49,359,004
5/8/2019		1,304,397	317,689	0	388,821	1,526,112	64,843	49,423,847
5/10/2019		1,324,636	324,778	0	388,846	1,554,457	55,698	49,479,545
5/13/2019		1,358,661	336,689	0	389,613	1,602,095	94,341	49,573,886
5/14/2019		1,367,404	340,300	0	392,569	1,616,590	29,805	49,603,691
5/15/2019		1,377,890	343,991	0	395,555	1,631,319	31,892	49,635,583
5/16/2019		1,388,385	347,396	0	398,400	1,646,102	31,528	49,667,111
5/17/2019		1,392,305	347,402	0	398,411	1,651,829	9,664	49,676,775
5/20/2019		1,422,111	348,125	0	399,337	1,693,599	73,225	49,750,000
5/21/2019		1,422,122	351,109	0	402,831	1,709,011	21,901	49,771,901
5/22/2019		1,422,127	354,868	0	407,545	1,723,681	23,148	49,795,049
5/23/2019		1,422,127	359,089	0	412,480	1,739,033	24,508	49,819,557
5/24/2019		1,423,330	362,889	0	416,758	1,751,629	21,877	49,841,434
5/28/2019		1,474,930	379,126	0	429,795	1,805,407	134,652	49,976,086
5/29/2019		1,487,617	382,814	0	432,044	1,805,407	18,624	49,994,710
5/30/2019		1,501,108	386,529	0	434,328	1,805,407	19,490	50,014,200
5/31/2019		1,514,699	390,991	0	438,276	1,805,407	22,001	50,036,201
6/3/2019		1,554,360	401,976	0	447,465	1,805,407	59,835	50,096,036
6/4/2019		1,567,393	405,467	0	450,143	1,805,407	19,202	50,115,238
6/5/2019		1,580,152	408,824	0	452,643	1,805,407	18,616	50,133,854
6/6/2019		1,593,974	412,413	0	453,384	1,805,412	18,157	50,152,011
6/7/2019		1,605,477	415,437	0	457,119	1,805,412	18,262	50,170,273
6/10/2019		1,645,077	425,274	0	465,274	1,805,787	57,967	50,228,240
6/11/2019		1,657,616	429,982	0	467,731	1,820,481	34,398	50,262,638
6/12/2019		1,670,878	434,302	0	470,291	1,835,951	35,612	50,298,250
6/13/2019		1,683,274	438,211	0	472,655	1,850,415	33,133	50,331,383
6/14/2019		1,695,787	442,090	0	473,047	1,865,034	31,403	50,362,786
6/17/2019		1,735,777	456,255	0	485,995	1,909,860	111,929	50,474,715
6/18/2019		1,746,832	456,457	0	486,149	1,921,617	23,168	50,497,883
6/19/2019		1,756,767	460,309	0	488,914	1,932,137	27,072	50,524,955
6/20/2019		1,768,929	465,029	0	492,942	1,944,767	33,540	50,558,495
6/21/2019		1,779,480	469,336	0	496,226	1,956,966	30,341	50,588,836
6/24/2019		1,815,427	483,003	0	505,275	1,993,837	95,534	50,684,370
6/25/2019		1,828,867	488,056	0	508,430	2,007,278	35,089	50,719,459
6/26/2019		1,839,669	492,179	0	510,891	2,018,070	28,178	50,747,637
6/28/2019		1,865,898	502,076	0	516,700	2,044,308	68,173	50,815,810
7/1/2019		1,903,748	516,101	0	524,763	2,082,175	97,805	50,913,615
7/2/2019		1,916,156	520,755	0	527,366	2,094,612	32,102	50,945,717
7/3/2019		1,918,620	521,781	0	527,933	2,097,079	6,524	50,952,241
7/5/2019		1,924,065	524,037	0	529,096	2,102,523	14,308	50,966,549
7/6/2019		1,936,631	529,267	0	531,710	2,115,090	32,977	50,999,526
7/8/2019		1,964,538	540,710	0	537,521	2,144,102	74,173	51,073,699
7/9/2019		1,975,531	545,239	0	539,996	2,156,529	30,424	51,104,123
7/10/2019		1,987,104	549,891	0	542,599	2,169,797	32,096	51,136,219
7/11/2019		1,997,842	554,113	0	545,010	2,182,144	29,718	51,165,937
7/12/2019		2,009,582	558,652	0	547,614	2,195,667	32,406	51,198,343
7/15/2019		2,042,519	571,338	0	554,932	2,233,662	90,936	51,289,279
7/16/2019		2,053,426	575,549	0	554,932	2,246,307	27,763	51,317,042
7/17/2019		2,064,939	579,970	0	559,955	2,259,364	34,014	51,351,056
7/18/2019		2,076,743	584,497	0	562,671	2,273,167	32,850	51,383,906
7/19/2019		2,086,570	588,310	0	564,911	2,284,478	27,191	51,411,097
7/22/2019		2,086,591	588,318	0	564,916	2,284,499	55	51,411,152
7/23/2019		2,091,788	590,461	0	565,950	2,289,778	13,653	51,424,805
7/24/2019		2,095,640	592,024	0	566,705	2,293,687	10,079	51,434,884
7/25/2019		2,099,472	593,538	0	567,433	2,297,600	9,987	51,444,871
7/26/2019		2,103,074	594,962	0	568,106	2,301,321	9,420	51,454,291
7/29/2019		2,103,516	595,146	0	568,185	2,301,770	1,154	51,455,445
7/30/2019		2,116,926	600,629	0	570,503	2,315,178	34,619	51,490,064
7/31/2019		2,128,480	605,461	0	572,758	2,328,433	31,896	51,521,960

**Table 1**  
**Extraction Well Pumped Water Volumes (gallons)**  
**Third Site Superfund Site**  
**Zionsville, Indiana**

Date	Mode	EW-1	EW-2	EW-3	EW-4	EW-5	Period Total	Total Pumped
8/1/2019	Continuous pumping	2,142,424	609,561	0	574,799	2,340,678	32,330	51,554,290
8/2/2019		2,155,389	613,890	0	576,933	2,353,644	32,394	51,586,684
8/5/2019		2,191,479	625,886	0	582,689	2,389,737	89,935	51,676,619
8/6/2019		2,203,775	629,994	0	584,640	2,402,030	30,648	51,707,267
8/7/2019		2,216,769	634,309	0	586,674	2,415,020	32,333	51,739,600
8/8/2019		2,229,845	638,588	0	588,700	2,428,096	32,457	51,772,057
8/9/2019		2,242,214	642,706	0	590,699	2,440,465	30,855	51,802,912
8/12/2019		2,280,788	655,553	0	596,748	2,479,037	96,042	51,898,954
8/13/2019		2,294,685	660,146	0	598,924	2,492,948	34,577	51,933,531
8/14/2019		2,307,417	664,274	0	600,935	2,505,680	31,603	51,965,134
8/15/2019		2,319,452	667,620	0	602,818	2,517,716	29,300	51,994,434
8/19/2019		2,370,652	681,512	0	611,086	2,568,919	124,563	52,118,997
8/20/2019		2,382,695	685,527	0	613,133	2,580,964	30,150	52,149,147
8/21/2019		2,395,510	689,793	0	615,275	2,593,781	32,040	52,181,187
8/22/2019		2,410,300	694,697	0	617,760	2,608,566	36,964	52,218,151
8/23/2019		2,420,806	698,344	0	619,600	2,619,073	26,500	52,244,651
8/26/2019		2,438,478	704,863	0	622,754	2,636,745	45,017	52,289,668
8/27/2019		2,452,089	710,552	0	626,018	2,650,355	36,174	52,325,842
8/28/2019		2,464,603	715,766	0	628,464	2,662,869	32,688	52,358,530
8/29/2019		2,478,177	721,340	0	630,914	2,676,443	35,172	52,393,702
8/30/2019		2,479,810	722,066	0	631,206	2,678,076	4,284	52,397,986

Notes:

1. Flow totalizer reset on December 11, 2013 during work on PLC.
2. Third Site system shut down 6/19/2014 though the end of the month due to equipment malfunctions and pumping did not resume until 7/21/2014.
3. Flow totalizer reset on February 25, 2015 due to electrical issue associated with surge protector. Pump and treatment was down between February 25 and April 2, 2015 due to the loss and replacement of electrical communication between Third Site and ECC.
4. Third Site system shut down on December 14 due to PLC card failure in the PLC panel. Extraction wells shut down on December 15. System restarted on December 29 after PLC was repaired and frozen lines had thawed out.
5. Flow totalizers reset on April 5, 2017 in order for the EW-5 totalizer to register flow.
6. Transducer in EW-1 stopped working on November 6, 2017; transducer in EW-3 may be giving false readings in November 2017; transducer in EW-5 stopped working on November 8, 2017. EW-1 and EW-5 transducers replaced in January 2018.
7. EW-3 was shut down in May 2018 due to damage to that well that occurred during ERH construction.
8. Flow totalizers reset on December 21, 2018.